Analysis Report about Amber Heard User Creation Report

Adel Abu Hashim, Mahmoud Nagy 14th September, 2021

Introduction

Note: This is report is a part of Case Study: "Reddit Social Network Analysis Against Influence Operation"

Introduction	
Gathered Results	4
PEAK YEARS:	4
PEAK MONTHS:	4
PEAK DATES:	4
Users Characteristics	5
ExcpertAccident:	5
TooShiftyForYou:	5
Exploring Creation Data	6
Estimation of the number of user accounts created in each year	6
Newly created accounts in 2018, 2019, 2020,2021	7
User accounts created in each date	7
Dates of Peaks in all Years	8
Estimation of the number of user accounts created in each month	9
Estimation of the number of user accounts created in each day	9
Investigate Each year in more details	10
2018	10
user accounts created in each month of 2018	10
user accounts created in each day of Dec, 2018	10
Dates of peaks in 2018	11
2019	12
user accounts created in each month of 2019	12
User accounts created in each day of Jan, 2019	12
Dates of peaks in 2019	13
2020	14
user accounts created in each month of 2020	14
Estimation of the number of user accounts created in each day of Jan, 2020	14
Dates of peaks in 2020	15
2021	16
user accounts created in each month of 2021	16
Estimation of the number of user accounts created in each day of Jan, 2021	16
Dates of peaks in 2021	17
User Characteristics	18
Banned / Unverified / Others in all years	18
Banned Users	19

Verified Mails	19
Is Gold?	20
Is it Mod (Moderator)?	20
User Characteristics over years	2
Unverified VS Total Accounts in each year	2
Check for the hour in which user accounts were created	22
Check for the hour in which user accounts were created on peak days	22
Users Link and Comment Karma	25
Accounts With The Largest Link Karma	25
Accounts With The Largest Comment Karma	26
Accounts With The Minimum Link Karma	26
Accounts With The Minimum Comment Karma	27

Gathered Results

PEAK YEARS:

Year	Number of accounts
2018	9567
2019	12264
2020	9348

PEAK MONTHS:

Year	Month	Number of accounts
2018	December	1056
2019	January	1245
2020	January	1151
2021	January	197

PEAK DATES:

Date	Number of accounts
30 December, 2018	43
13th January, 2019	53
04th February, 2020	65
04th February, 2021	15

Users Characteristics

- More than **50**% of reddit accounts were **created** in the **last 4 years**.
- 16% (11.3K) of the accounts do not have a verified email.
- 7.12% (5K) of the accounts are banned.

ExcpertAccident:

- Gold User
- Created on 08/12/2018
- Got the second largest link karma with more than 10 M
- Has a negative submission on 10/11/2020
- https://www.reddit.com/r/redditmoment/comments/jrr5po/well guys we epic redditors singlehandedly_took/

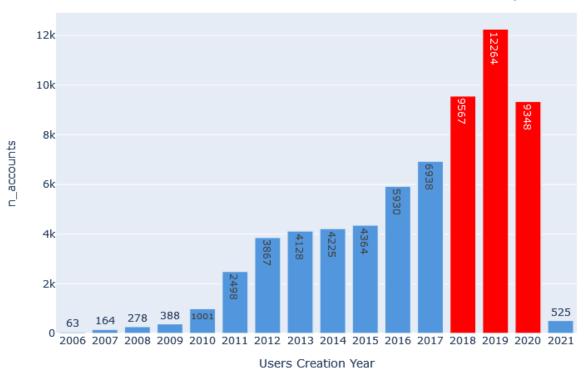
TooShiftyForYou:

- Gold User
- Created on 26/07/2015
- Got the largest comment karma with more than 23.4 M
- Posting negative comments.

Exploring Creation Data

Estimation of the number of user accounts created in each year

Estimation of the number of user accounts created in each year



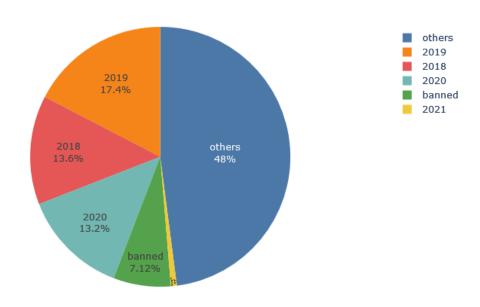
Notes: -

- Reddit began to achieve a notable level of popularity in mid-2010, and it has expanded its reach since. It had become "really popular" in early 2013.
- Reddit was launched in June 2005
- The effect of 2020 is obvious, but we can see a small effect from 2021 as the data collected till May of this year.

Newly created accounts in 2018, 2019, 2020,2021

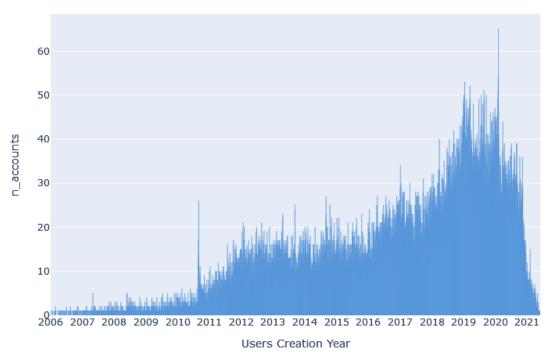
As the data collected from 2018 to 2021, the most suspicious accounts are the new ones which are created between 2018 and 2021.

newly created accounts



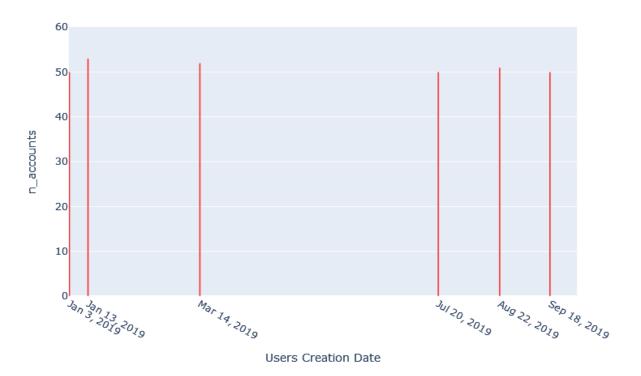
User accounts created in each date

Estimation of the number of user accounts created in each date

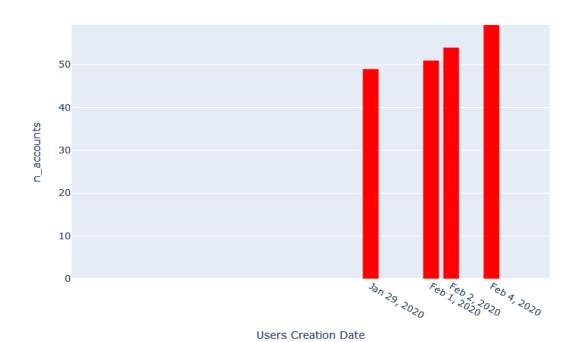


Dates of Peaks in all Years

Dates with the highest accounts creation

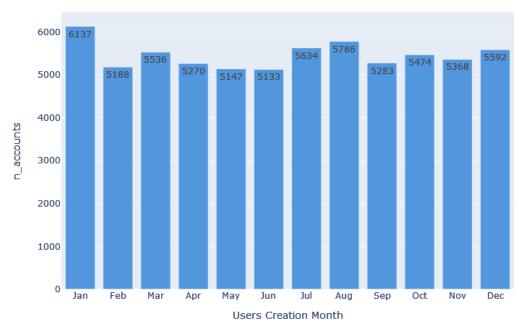


Dates with the highest accounts creation



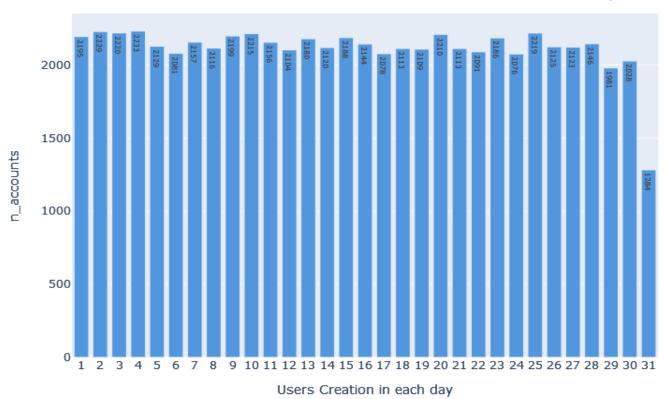
Estimation of the number of user accounts created in each month

Estimation of the number of user accounts created in each month



Estimation of the number of user accounts created in each day

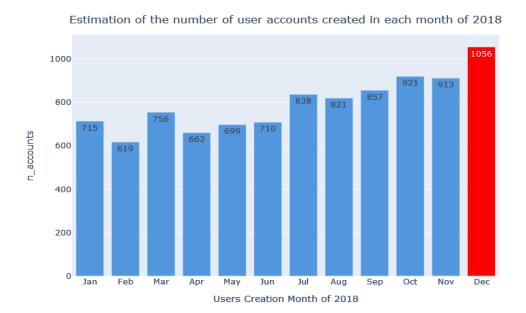
Estimation of the number of user accounts created in each day



Investigate Each year in more details

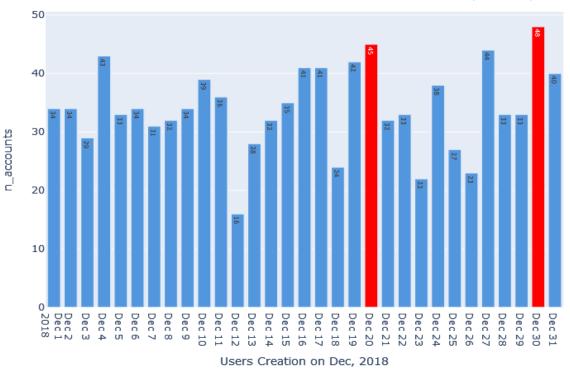
2018

user accounts created in each month of 2018



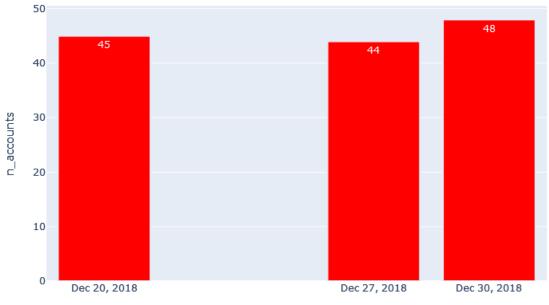
user accounts created in each day of Dec, 2018





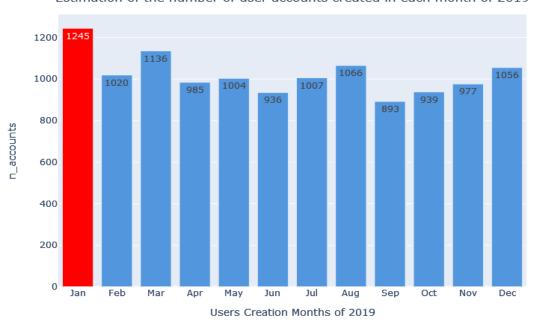
Dates of peaks in 2018

Dates with the highest accounts creation in 2018



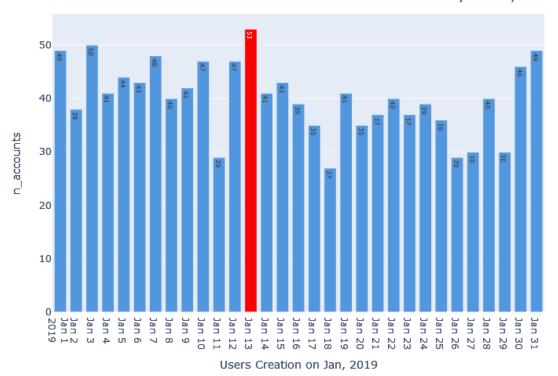
user accounts created in each month of 2019

Estimation of the number of user accounts created in each month of 2019

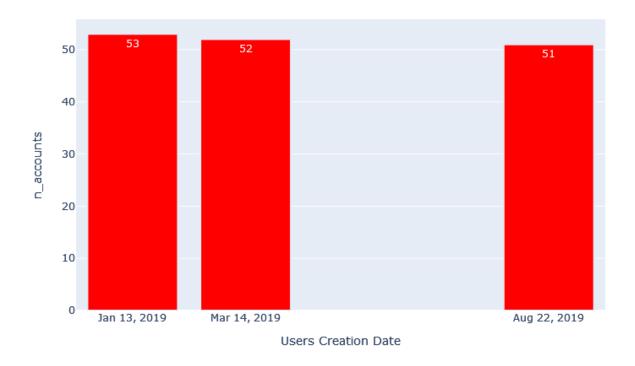


User accounts created in each day of Jan, 2019

Estimation of the number of user accounts created in each day of Jan, 2019



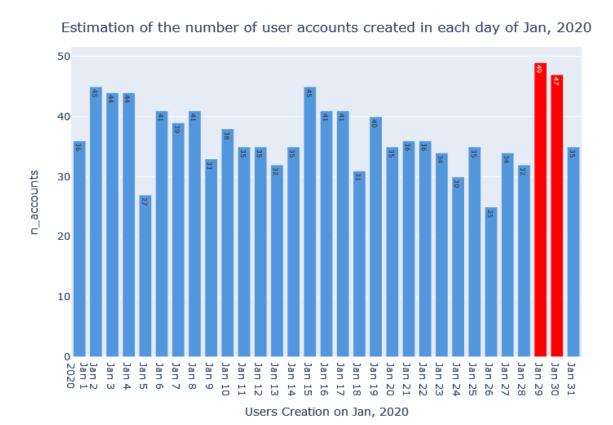
Dates with the highest accounts creation in 2019



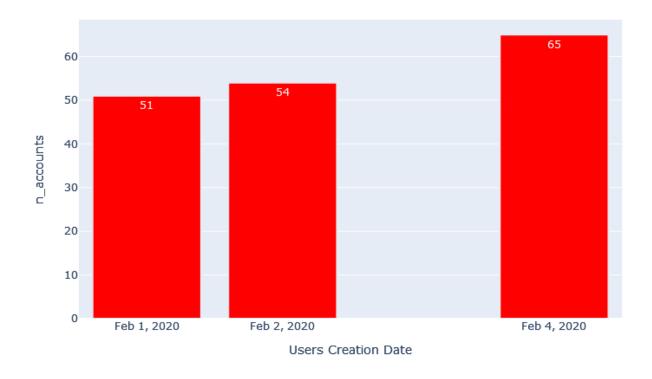
user accounts created in each month of 2020



Estimation of the number of user accounts created in each day of Jan, 2020

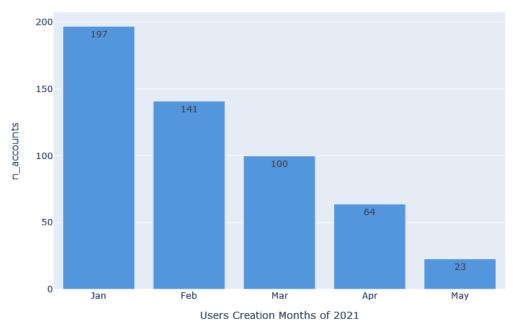


Dates with the highest accounts creation in 2020



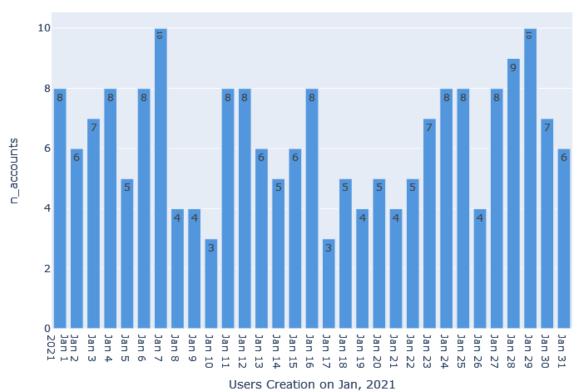
user accounts created in each month of 2021

Estimation of the number of user accounts created in each month of 2021



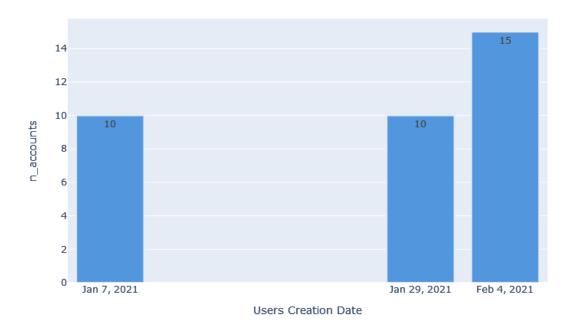
Estimation of the number of user accounts created in each day of Jan, 2021

Estimation of the number of user accounts created in each day of Jan, 2021



Dates of peaks in 2021

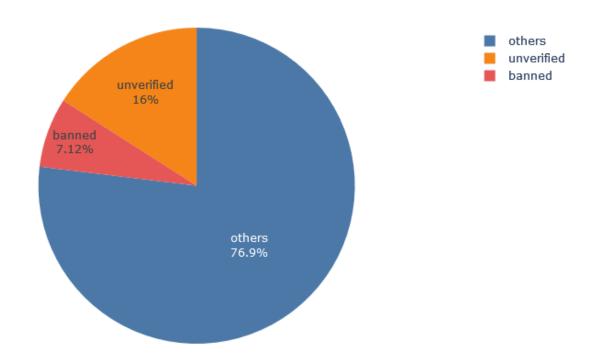
Dates with the highest accounts creation in 2020



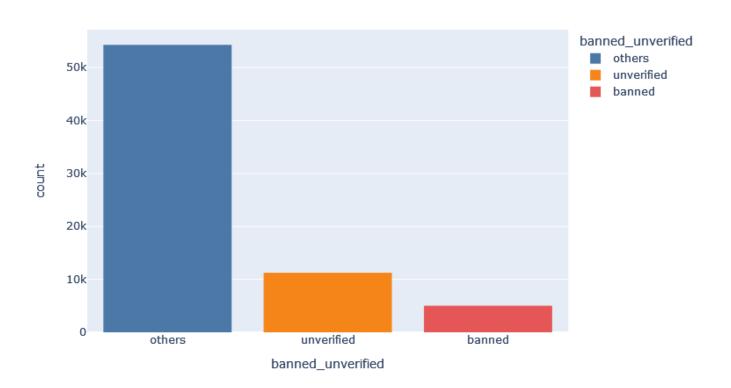
User Characteristics

Banned / Unverified / Others in all years

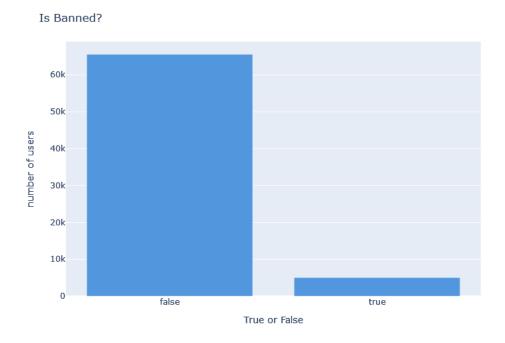
banned / unverified /others in all years



banned / unverified /others in all years



Banned Users



There are **5K banned** users.

Verified Mails

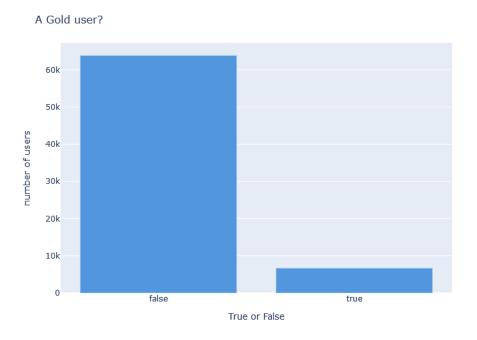


There are **11.4K** users with **no verified email.**

Verifying mail is not a mark that the account is spam, as more expensive bots have verified mail.

Is Gold?

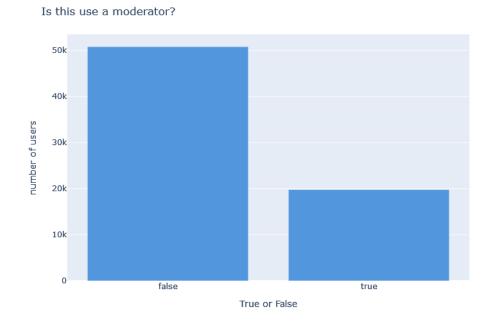
Gold is a way to show appreciation for an exceptional contribution to Reddit.



Is it Mod (Moderator)?

A moderator, or a mod for short, are redditors who volunteer their time to help guide and create Reddit's many communities. Each Reddit community has its own focus, look, and rules, including what posts are on-topic there and how users are expected to behave. ... Add other redditors as moderators.

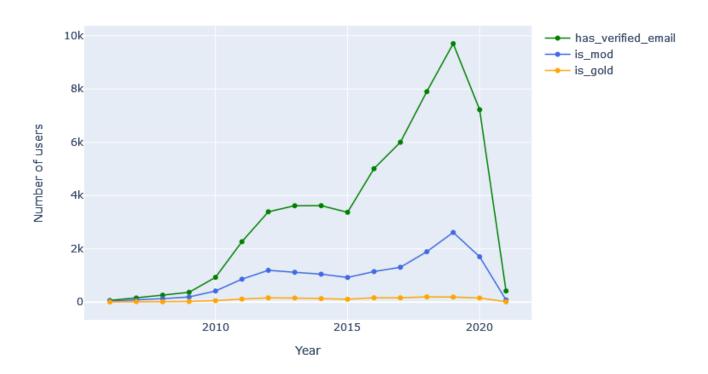
https://www.reddit.com/r/help/comments/1f0zni/what are mods for and what are their/



User Characteristics over years

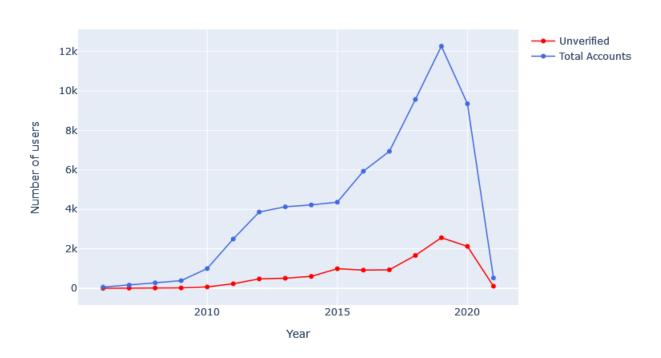
As we don't have the year of creation of banned accounts, the analysis won't contain them.

User Charcteristcs count

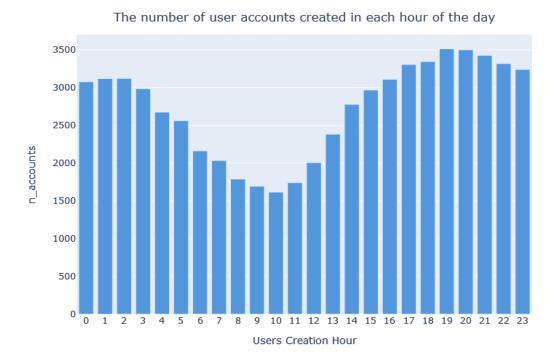


Unverified VS Total Accounts in each year

Unverified VS Total Accounts in each year

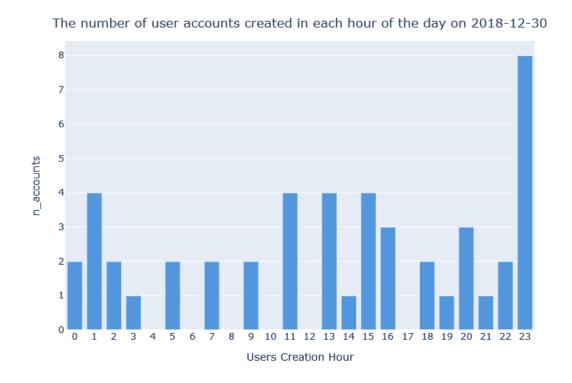


Check for the hour in which user accounts were created

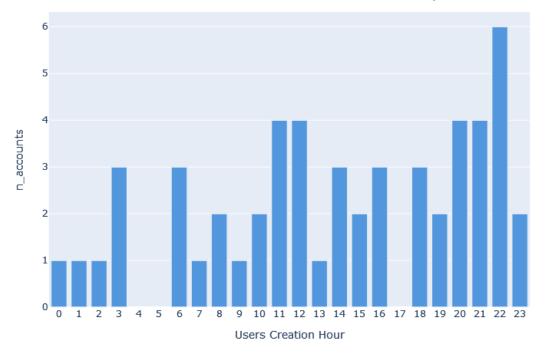


Check for the hour in which user accounts were created on peak days

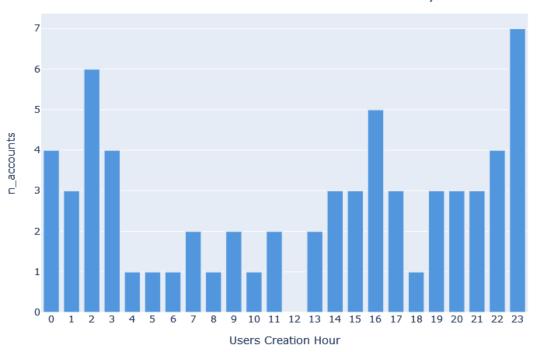
Note that we only have limited user data on each date.



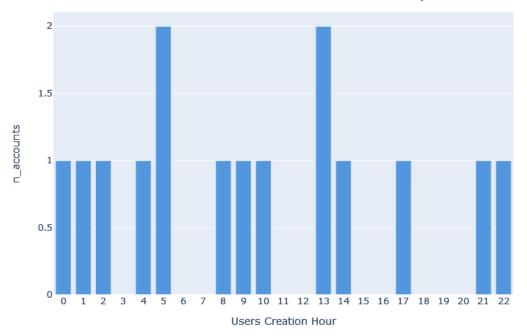




The number of user accounts created in each hour of the day on 2020-02-04



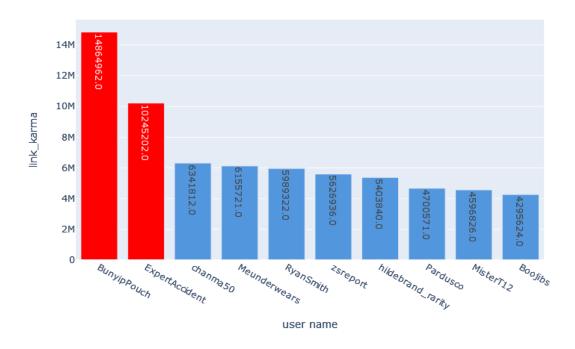
The number of user accounts created in each hour of the day on 2021-02-04



Users Link and Comment Karma

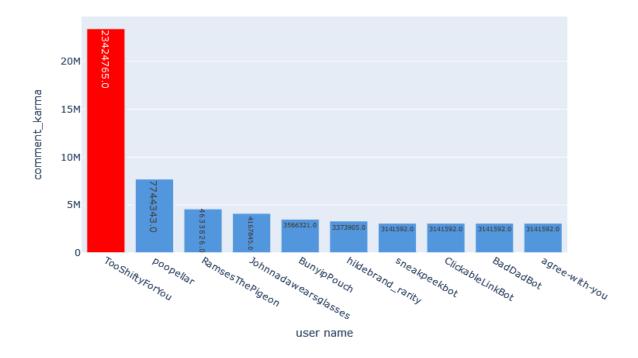
Accounts With The Largest Link Karma

Accounts with highest link karma



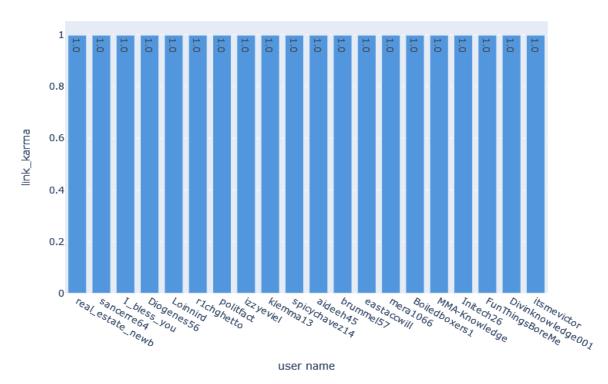
Accounts With The Largest Comment Karma

Accounts with highest comment karma



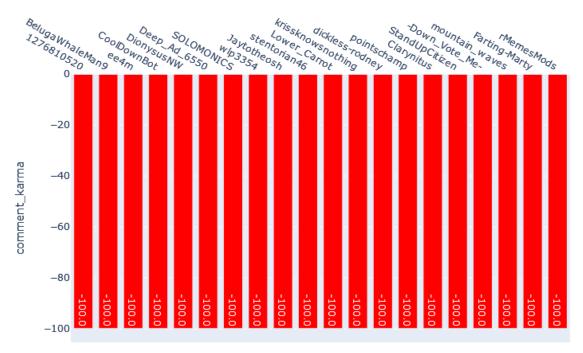
Accounts With The Minimum Link Karma

Accounts with minimum link karma



Accounts With The Minimum Comment Karma





Accounts with minimum comment karma

Conclusion

. . .